AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the "listing of claims" below. No new matter is introduced by the amendments, which are supported throughout the application as filed.

Listing of Claims
This listing replaces all prior listings of the claims.

1 (Amended). A method ~~for modulating an immune response~~ of preventing or treating an immune disorder in ~~an animal~~ a patient in need thereof, which comprises administering to said ~~animal~~ patient an effective amount of an IL-27R/WSX-1 ligand.

2 (Amended). The method of claim 1, wherein said ~~modulation is~~ treating or preventing comprises immune suppression and said ligand is an IL-27R/WSX-1 agonist.

3 (Amended). The method of claim 2, wherein said agonist is selected from the group consisting of IL-27, an active fragment of IL-27, and an agonistic antibody ~~to IL-27R/WSX-1 which~~ that enhances IL-27R/WSX-1 activity.

4 (Amended). The method of claim 1, wherein said ~~modulation is~~ treating or preventing comprises immune activation and said ligand is an IL-27R/WSX-1 antagonist.

5 (Amended). The method of claim 4, wherein said antagonist is an inactive IL-27 fragment which retains IL-27R/WSX-1 binding affinity, or an antagonist antibody ~~to IL-27R/WSX-1 which~~ that suppresses IL-27R/WSX-1 activity.

6 (Amended). A method for modulating a T-helper cell mediated immune response in ~~an animal~~ a patient in need thereof, which comprises administering to said ~~animal~~ patient an effective amount of an IL-27R/WSX-1 ligand.

7 (previously presented). The method of claim 6, wherein said modulation is suppression and said ligand is an IL-27R/WSX-1 agonist.

8 (previously presented). The method of claim 7, wherein said agonist is selected from the group consisting of IL-27, an active fragment of IL-27, and an agonistic antibody to IL-27R/WSX-1 which enhances IL-27R/WSX-1 activity.

9 (previously presented). The method of claim 6, wherein said modulation is activation and said ligand is an IL-27R/WSX-1 antagonist.

10 (previously presented). The method of claim 9, wherein said antagonist is an inactive IL-27 fragment which retains IL-27R/WSX-1 binding affinity, or an antagonist antibody to IL-27R/WSX-1 which suppresses IL-27R/WSX-1 activity.

11 (previously presented). The method of claim 6, wherein said T-helper cell is Th1.

12 (previously presented). The method of claim 6, wherein said T-helper cell is Th2.

13 (Amended). A method for modulating an interferon-γ mediated immune response in ~~an animal~~ a patient in need thereof, which comprises administering to said ~~animal~~ patient an effective amount of an IL-27R/WSX-1 ligand.

14 (previously presented). The method of claim 13, wherein said modulation is suppression and said ligand is an IL-27R/WSX-1 agonist.

15 (previously presented). The method of claim 14, wherein said agonist is selected from the group consisting of IL-27, an active fragment of IL-27, and an agonistic antibody to IL-27R/WSX-1 which enhances IL-27R/WSX-1 activity.

16 (previously presented). The method of claim 13, wherein said modulation is activation and said ligand is an IL-27R/WSX-1 antagonist.

17 (previously presented). The method of claim 16, wherein said antagonist is an inactive IL-27 fragment which retains IL-27R/WSX-1 binding affinity, or an antagonist antibody to IL-27R/WSX-1 which suppresses IL-27R/WSX-1 activity.

18 (Amended). A method for treating immune hyperactivity in ~~an animal~~ a patent in need thereof, which comprises administering to said ~~animal~~ patient an effective amount of an IL-27R/WSX-1 ligand.

19 (Amended). A method for treating an immune hyperactivity disorder in ~~an animal~~ a patient in need thereof, which comprises administering to said ~~animal~~ patient an effective amount of an IL-27R/WSX-1 ligand.

20 (previously presented). The method of claim 19, wherein said immune disorder is selected from the group consisting of autoimmune disorders, hypersensitivity disorders, allergies, and asthma.

21 (Amended). The method of claim 20, wherein said immune disorder is selected from the group consisting of: Acquired Immune Deficiency Syndrome (AIDS); acute pancreatitis; Addison's disease; alcohol-induced liver injury; ~~including~~ alcoholic cirrhosis; Alzheimer's disease; amyelolateroschlerosis; asthma; ~~and other~~ pulmonary diseases; atherosclerosis; autoimmune vasculitis; autoimmune hepatitis-induced hepatic injury; biliary cirrhosis; cachexia/anorexia; ~~including~~ AIDS-induced cachexia; cancer; ~~such as~~ multiple myeloma; leukemia; ~~and~~ myelogenous ~~and other~~ leukemias; ~~as well as~~ tumor metastasis; chronic fatigue syndrome; Clostridium associated illnesses; ~~including~~ Clostridium-associated diarrhea; a coronary condition; ~~and~~ a coronary indication; ~~including~~ congestive heart failure; coronary restenosis; myocardial infarction; myocardial dysfunction; ~~and~~ a coronary artery bypass graft associated condition; diabetes; ~~including~~ juvenile onset Type 1 diabetes; diabetes mellitus; ~~and~~ insulin resistance; endometriosis; endometritis; an endometriosis/endometritis related conditions; epididymitis; erythropoietin resistance; fever; fibromyalgia; ~~or~~ analgesia; glomerulonephritis; graft versus host disease/transplant rejection; Graves' disease; Guillain-Barre

syndrome; Hashimoto's disease; hemolytic anemia; hemorrhagic shock; hyperalgesia; inflammatory bowel disease;~~s including~~ ulcerative colitis; ~~and~~ Crohn's disease; an inflammatory conditions of a joint; ~~and~~ rheumatic diseases ~~including,~~ osteoarthritis;~~,~~ rheumatoid arthritis;~~,~~ juvenile (rheumatoid) arthritis;~~,~~ seronegative polyarthritis;~~,~~ ankylosing spondylitis;~~,~~ Reiter's syndrome; ~~and~~ reactive arthritis;~~,~~ Still's disease;~~,~~ psoriatic arthritis;~~,~~ enteropathic arthritis;~~,~~ polymyositis;~~,~~ dermatomyositis;~~,~~ scleroderma;~~,~~ systemic sclerosis;~~,~~ vasculitis; ~~(e.g.,~~ Kawasaki's disease;~~),~~ cerebral vasculitis;~~,~~ Lyme disease;~~,~~ staphylococcal-inducedarthritis;~~,~~ Sjogren's syndrome;~~,~~ rheumatic fever;~~,~~ polychondritis; ~~and~~ polymyalgia rheumatica; ~~and~~ giant cell arteritis; inflammatory eye disease;~~,~~ ~~as may be associated with, for example, corneal transplant; inflammatory eye disease, as may be associated with, e.g.,~~ corneal transplant associated inflammatory eye disease; inflammatory bowel disease; ischemia;~~,~~ ~~including~~ cerebral ischemia; Kawasaki's disease; learning impairment; lung diseases~~;~~ lupus nephritis; multiple sclerosis; myasthenia gravis; myopathi~~ces~~neuroinflammatory diseases~~;~~ neurotoxicity; ocular diseases and conditions;~~,~~ ~~including~~ ocular degeneration; ~~and~~ uveitis; osteoporosis; pain;~~,~~ ~~including~~ cancer-related pain; Parkinson's disease; pemphigus; periodontal disease; Pityriasis rubra pilaris; pre-term labor; prostatitis; ~~and~~ a prostatitis related conditions~~;~~ psoriasis; ~~and~~ a psoriasis related conditions~~;~~ psoriatic arthritis; pulmonary fibrosis; reperfusion injury; rheumatic fever; rheumatoid arthritis; sarcoidosis; scleroderma; septic shock; side effects from radiation therapy; Sjogren's syndrome; sleep disturbance; spondyloarthropathies; systemic lupus erythematosus; temporal mandibular joint disease; thyroiditis; tissue transplantation; ~~or~~ an inflammatory condition resulting from strain;~~,~~ an inflammatory condition resulting from sprain;~~,~~ an inflammatory condition resulting from cartilage damage;~~,~~ an inflammatory condition resulting from trauma;~~,~~ ~~and~~ an inflammatory condition resulting from orthopedic surgery; an inflammatory condition resulting from infection; transplant rejection; uveitis; and vasculitis;~~,~~ ~~or an inflammatory condition resulting from strain, sprain, cartilage damage, trauma, orthopedic surgery, infection or other disease processes~~.

22 (Amended). A method for treating a T-helper cell mediated disorder in ~~an animal~~ a patient in need thereof, which comprises administering to said ~~animal~~ patient an effective amount of an IL-27R/WSX-1 ligand.

23 (Amended). The method of claim 22, wherein said T-helper cell mediated disorder is selected from the group consisting of: Acquired Immune Deficiency Syndrome (AIDS); acute pancreatitis; Addison's disease; alcohol-induced liver injury; ~~including~~ alcoholic cirrhosis; Alzheimer's disease; amyelolateroschlerosis; asthma; ~~and other~~ pulmonary diseases~~;~~ atherosclerosis; autoimmune vasculitis; autoimmune hepatitis-induced hepatic injury; biliary cirrhosis; cachexia/anorexia~~;~~ ~~including~~ AIDS-induced cachexia; cancer~~;~~ ~~such as~~ multiple myeloma; leukemia; ~~and~~ myelogenous ~~and other~~ leukemias~~;~~ ~~as well as~~ tumor metastasis; chronic fatigue syndrome; Clostridium associated illnesses~~;~~ ~~including~~ Clostridium-associated diarrhea; a coronary condition~~;~~ ~~and~~ a coronary indication~~;~~ ~~including~~ congestive heart failure~~;~~ coronary restenosis~~;~~ myocardial infarction~~;~~ myocardial dysfunction~~;~~ ~~and~~ a coronary artery bypass graft associated condition; diabetes~~;~~ ~~including~~ juvenile onset Type 1 diabetes~~;~~ diabetes mellitus~~;~~ ~~and~~ insulin resistance; endometriosis~~;~~ endometritis~~;~~ an endometriosis/endometritis related conditions~~;~~ epididymitis; erythropoietin resistance; fever; fibromyalgia; ~~or~~ analgesia; glomerulonephritis; graft versus host disease/transplant rejection; Graves' disease; Guillain-Barre syndrome; Hashimoto's disease; hemolytic anemia; hemorrhagic shock; hyperalgesia; inflammatory bowel disease~~;~~ ~~including~~ ulcerative colitis; ~~and~~ Crohn's disease; an inflammatory conditions of a joint; ~~and~~ rheumatic diseases ~~including,~~ osteoarthritis~~;~~ rheumatoid arthritis~~;~~ juvenile (rheumatoid) arthritis~~;~~ seronegative polyarthritis~~;~~ ankylosing spondylitis~~;~~ Reiter's syndrome; ~~and~~ reactive arthritis~~;~~ Still's disease~~;~~ psoriatic arthritis~~;~~ enteropathic arthritis~~;~~ polymyositis~~;~~ dermatomyositis~~;~~ scleroderma~~;~~ systemic sclerosis~~;~~ vasculitis; ~~(e.g.,~~ Kawasaki's disease~~;)~~ cerebral vasculitis~~;~~ Lyme disease~~;~~ staphylococcal-inducedarthritis~~;~~ Sjogren's syndrome~~;~~ rheumatic fever~~;~~ polychondritis; ~~and~~ polymyalgia rheumatica; ~~and~~ giant cell arteritis; inflammatory eye disease~~;~~ ~~as may be associated with, for example, corneal transplant; inflammatory eye disease, as may be associated with, e.g.,~~ corneal transplant associated inflammatory eye disease; inflammatory bowel disease; ischemia~~;~~ ~~including~~ cerebral ischemia; Kawasaki's disease; learning impairment; lung diseases; lupus nephritis; multiple sclerosis; myasthenia gravis; myopathicesneuroinflammatory diseases; neurotoxicity; ocular diseases and conditions~~;~~ ~~including~~ ocular degeneration; ~~and~~ uveitis; osteoporosis; pain~~;~~ ~~including~~ cancer-related pain; Parkinson's disease; pemphigus; periodontal disease; Pityriasis rubra pilaris; pre-

term labor; prostatitis; ~~and~~ a prostatitis related conditions~~;~~ psoriasis; ~~and~~ a psoriasis related conditions~~;~~ psoriatic arthritis; pulmonary fibrosis; reperfusion injury; rheumatic fever; rheumatoid arthritis; sarcoidosis; scleroderma; septic shock; side effects from radiation therapy; Sjogren's syndrome; sleep disturbance; spondyloarthropathies; systemic lupus erythematosus; temporal mandibular joint disease; thyroiditis; tissue transplantation; ~~or~~ an inflammatory condition resulting from strain; ~~,~~ an inflammatory condition resulting from sprain; ~~,~~ an inflammatory condition resulting from cartilage damage; ~~,~~ an inflammatory condition resulting from trauma; ~~,~~ ~~and~~ an inflammatory condition resulting from orthopedic surgery; an inflammatory condition resulting from infection; transplant rejection; uveitis; and vasculitis. ~~,~~ ~~or an inflammatory condition resulting from strain, sprain, cartilage damage, trauma, orthopedic surgery, infection or other disease processes~~.

24 (Amended). A method for modulating a T-helper cell mediated immune response in ~~an animal~~ a patient in need thereof, which comprises administering to said ~~animal~~ patient an effective amount of an IL-27R/WSX-1 ligand.

25 (previously presented). The method of claim 24, wherein said T-helper cell is Th1.

26 (previously presented). The method of claim 24, wherein said T-helper cell is Th2.

27 (previously presented). A pharmaceutical composition comprising: (i) an effective amount of an IL-27R/WSX-1 ligand; and (ii) a pharmaceutically acceptable carrier.

28 (previously presented). The pharmaceutical composition of claim 27, wherein said IL-27R/WSX-1 ligand is an agent that increases WSX-1 activity.

29 (previously presented). The pharmaceutical composition of claim 28, wherein said agent comprises IL-27 or an active fragment thereof.

30 (previously presented). The pharmaceutical composition of claim 28, wherein said agent comprises an agonistic antibody that binds to an epitope on WSX-1.

31 (previously presented). The pharmaceutical composition of claim 28, wherein said agent comprises an agonistic antibody that binds to an epitope on IL-27R.

32 (previously presented). The pharmaceutical composition of claim 28, wherein said agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

33 (previously presented). A method of treating immune hyperreactivity, which comprises administering an effective amount of an agent that increases WSX-1 activity.

34 (previously presented). The method of claim 33, wherein the agent comprises IL-27 or an active fragment thereof.

35 (previously presented). The method of claim 33, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

36 (previously presented). The method of claim 33, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

37 (previously presented). The method of claim 33, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

38 (previously presented). A method of suppressing polarized T cells, which comprises administering an effective amount of an agent that increases WSX-1 activity.

39 (previously presented). The method of claim 38, wherein the agent comprises IL-27 or an active fragment thereof.

40 (previously presented). The method of claim 38, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

41 (previously presented). The method of claim 38, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

42 (previously presented). The method of claim 38, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

43 (previously presented). A method of treating Th1-mediated disease, which comprises administering an effective amount of an agent that increases WSX-1 activity.

44 (previously presented). The method of claim 43, wherein the agent comprises IL-27 or an active fragment thereof.

45 (previously presented). The method of claim 43, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

46 (previously presented). The method of claim 43, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

47 (previously presented). The method of claim 43, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

48 (previously presented). A method of treating Th2-mediated disease, which comprises administering an effective amount of an agent that increases WSX-1 activity.

49 (previously presented). The method of claim 48, wherein the agent comprises IL-27 or an active fragment thereof.

50 (previously presented). The method of claim 48, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

51 (previously presented). The method of claim 48, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

52 (previously presented). The method of claim 48, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

53 (previously presented). A method of treating IFN-g mediated disease, which comprises administering an effective amount of an agent that increases WSX-1 activity.

54 (previously presented). The method of claim 53, wherein the agent comprises IL-27 or an active fragment thereof.

55 (previously presented). The method of claim 53, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

56 (previously presented). The method of claim 53, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

57 (previously presented). The method of claim 53, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

58 (previously presented). A method of treating IgE-mediated disease, which comprises administering an effective amount of an agent that increases WSX-1 activity.

59 (previously presented). The method of claim 58, wherein the agent comprises IL-27 or an active fragment thereof.

60 (previously presented). The method of claim 58, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

61 (previously presented). The method of claim 58, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

62 (previously presented). The method of claim 58, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

63 (previously presented). A method of treating asthma, which comprises administering an effective amount of an agent that increases WSX-1 activity.

64 (previously presented). The method of claim 64, wherein the agent comprises IL-27 or an active fragment thereof.

65 (previously presented). The method of claim 64, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

66 (previously presented). The method of claim 64, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

67 (previously presented). The method of claim 64, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

68 (previously presented). A method of treating allergy, which comprises administering an effective amount of an agent that increases WSX-1 activity.

69 (previously presented). The method of claim 68, wherein the agent comprises IL-27 or an active fragment thereof.

70 (previously presented). The method of claim 68, wherein the agent comprises an agonistic antibody that binds to an epitope on WSX-1.

71 (previously presented). The method of claim 68, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27R.

72 (previously presented). The method of claim 68, wherein the agent comprises an agonistic antibody that binds to an epitope on IL-27RPP.

73 (New). The method of claim 1, wherein said immune disorder is is selected from the group consisting of: Acquired Immune Deficiency Syndrome (AIDS); acute pancreatitis; Addison's disease; alcohol-induced liver injury; alcoholic cirrhosis; Alzheimer's disease; amyelolateroschlerosis; asthma; pulmonary disease; atherosclerosis; autoimmune vasculitis; autoimmune hepatitis-induced hepatic injury; biliary cirrhosis; cachexia/anorexia; AIDS-induced cachexia; cancer; multiple myeloma; leukemia; myelogenous leukemias; tumor metastasis; chronic fatigue syndrome; Clostridium associated illnesses; Clostridium-associated diarrhea; a coronary condition; a coronary indication; congestive heart failure; coronary restenosis; myocardial infarction; myocardial dysfunction; a coronary artery bypass graft associated condition; diabetes; juvenile onset Type 1 diabetes; diabetes mellitus; insulin resistance; endometriosis; endometritis; an endometriosis/endometritis related condition; epididymitis; erythropoietin resistance; fever; fibromyalgia; analgesia; glomerulonephritis; graft versus host disease/transplant rejection; Graves' disease; Guillain-Barre syndrome; Hashimoto's disease; hemolytic anemia; hemorrhagic shock; hyperalgesia; inflammatory bowel disease; ulcerative colitis; Crohn's disease; an inflammatory conditions of a joint; rheumatic disease; osteoarthritis; rheumatoid arthritis; juvenile (rheumatoid) arthritis; seronegative polyarthritis; ankylosing spondylitis; Reiter's syndrome; reactive arthritis; Still's disease; psoriatic arthritis; enteropathic arthritis; polymyositis; dermatomyositis; scleroderma; systemic sclerosis; vasculitis; Kawasaki's disease; cerebral vasculitis; Lyme disease; staphylococcal-inducedarthritis; Sjogren's syndrome; rheumatic fever; polychondritis; polymyalgia rheumatica; giant cell arteritis; inflammatory eye disease; corneal transplant associated inflammatory eye disease; inflammatory bowel disease;

ischemia; cerebral ischemia; Kawasaki's disease; learning impairment; lung diseases; lupus nephritis; multiple sclerosis; myasthenia gravis; myopathicesneuroinflammatory diseases; neurotoxicity; ocular diseases and conditions; ocular degeneration; uveitis; osteoporosis; pain; cancer-related pain; Parkinson's disease; pemphigus; periodontal disease; Pityriasis rubra pilaris; pre-term labor; prostatitis; a prostatitis related conditions; psoriasis; a psoriasis related conditions; psoriatic arthritis; pulmonary fibrosis; reperfusion injury; rheumatic fever; rheumatoid arthritis; sarcoidosis; scleroderma; septic shock; side effects from radiation therapy; Sjogren's syndrome; sleep disturbance; spondyloarthropathies; systemic lupus erythematosus; temporal mandibular joint disease; thyroiditis; tissue transplantation; an inflammatory condition resulting from strain; an inflammatory condition resulting from sprain; an inflammatory condition resulting from cartilage damage; an inflammatory condition resulting from trauma; an inflammatory condition resulting from orthopedic surgery; an inflammatory condition resulting from infection; transplant rejection; uveitis; and vasculitis.